Work Orde January-18-13 9		703		*957	'n.3*			ASI	M		Page 1
Revision ID: Item Name:	D3215-3 Webbing Tidy 1/16/13	Start Qty: 20.00	*20*	Accept	*N900		100)* s	Setup Star	1.71	S1* S2*
Required Date: Reference:	2/08/13	Req'd Qty: 20.00	*20*		Customer:						
Approvals:	Process Pla	in: ML5	Date: /3-01-1	& Tooling:	D	ate:		F	tun Star	1/1	R1*
	QC:		Date:	_ SPC (Y/N):	D	ate:			Sto	*N	R2*
Sequence ID/ Work Center ID)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	ision Nbr									
D3215	Rev	D									:
*100 *100* Waterjet FLOW CNC Waterje	֔	FLOW WATER JET Memo I-Cut as per Rev:	Dwg D3215 (D3215-3A)2-Deburr if necessary	0.00 0.00 Dwg Rev:Pr 3-Identify a	og s D3215-3A			20	O		Jm 13:5-2
*110 * 1 1 \n^* QC Quality Control		QC2- Inspect parts off m Memo	achine FAI/FAIB	0.00				20	_0		J <u>m 13</u> -5- à
*120 *120* QC Quality Control		QC8- Inspect parts - seco	ond check	0.00 BS 3				20		/	*

NCR:	Yes	/	No

DQA:

Date:

NCR:	•														
										•			QA Closed:	Date:	
Work Ord	er:						DISPOSITION				AGAINS	r DEI	PARTMENT/	PROCESS	
							Rework]		Skid-tube	Crosstube	<u>-</u>		Water Jet	Engineering
Part	No.						Scrap		ı	Machining	Small Fab	Й	Pro	d. Eng. Coor.	Quality
							Use-as-is		Thern	noforming	Finishing	$^{\prime}$	Rec/Stor	e/Packaging	Other
NCR	No.				<u> </u>		Work Order Update	J		Large Fab	Composite			Supplier	j [_]
Root					Desc	crip	tion of work order update	Π	Initial	Ac	tion		Sign &		
Cause	_	Date	Step	Qty		0	r Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification	QC Inspector
oc/Data	L														·
quip/Tooling	<u> </u>														
perator	<u> </u>														
Naterial	L				<u> </u>										
etup	<u> </u>														
ther	<u> </u>														
rocess 	-							1							
upplier	-							١.							-
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Inapproved	L			<u> </u>	<u> </u>			<u> </u>	T CATE	GOPV					
Landi	ng (Gear					General	<u> </u>	.i CAIL	CONT					
		Bending			Γ		Bend		Grain				Ovalized	Г	Pressure/Forced
		Centre No	t Concer	ntric to	o/s	_	BOM/Route		Hardwa	re		\vdash	Over/Under	tolerance	Temperature/Cure
		Cracks				$\overline{}$	Broken/Damaged		Inspecti	on Incomplete			Part Incorred	<u> </u>	Weld
		Crushed/0	Crimped.		Ī		Burrs		1	ions Incomplete/	'Unclear		Part Lost/Mi	<u> </u>	Wrong Stock Pulled
		Cuffs			ſ		Contamination		Mainte	nance			Part Moved	_	_
		Heat Trea	t		Ī		Countersink	Mislabeled Positioned Wrong							
		Inspection	Strip in	Tube			Cut Too Short	Short Misread Power Loss/Surge Othe					Other		
		Ripples in	Bend		[Drill Holes		Offset						
ļ		Torque W	aves in E	xtrusio	n [Drawing		Out of 0	Calibration					
	Turning Sequence Finish Out of Sequence														

Outside Dimensions

Wave/Twist in Tube

0.00

NC BRAKE

Memo

Form D3215-3A as per Dwg D3215

150 Brake NC

Brake NC

NCR:	Yes /	No	WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	•		
			 -	

									QA Closed:	Date:	
Work Orde	er:				DISPOSITION		A	AGAINST DEI	PARTMENT/	PROCESS	
Part N	No	.,			Rework Scrap Use-as-is Work Order Update		Machining Si noforming F	rosstube mall Fab Finishing mposite		Water Jet d. Eng. Coor. e/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Action		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Descriptio	on	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator	ator										
Material	rial										
Setup											
Other											
Process							,				
Supplier		1									
Training											,
Unapproved			L			<u> </u>					
				•		AULT CATE	GORY				
Landii	ng Gear			_	General	— ъ.			l	_	7_ /
	Bending				Bend	Grain			Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to (^{5)/S} -	BOM/Route	Hardwa			Over/Under	<u></u>	Temperature/Cure
	Cracks				Broken/Damaged	—	ion Incomplete	<u> </u>	Part Incorred	 	Weld
	Crushed/	Crimped.		-	Burrs	—	tions Incomplete/Uncle	ar	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs Contamination				Mislab	enance		Part Moved	to a second		
 	Heat Trea								Positioned V		Other
					Offset	Calibantia a			· • • • • • • • • • • • • • • • • • • •		
Torque Waves in Extrusion Drawing					Out of Calibration						
Turning Sequence Finish					Out of Sequence				<u></u>		
Wave/Twist in Tube Folio Outside Dimensions											

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Work Orde		703		*957				Page 3			
Item ID: Revision ID: Item Name:	D3215-3 Webbing Tidy	<i>y</i>		Accept	*N900	040	100	ገ* s	Setup Star	ı VI .	S1* S2*
Start Date: Required Date: Reference:	1/16/13 2/08/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item II Customer:	D:					
Approvals:		an:		Tooling: SPC (Y/N):		ite:	<u>-</u>	F	Run Star Stop	'' 	R1* R2*
Sequence ID/ Work Center II 160 *160* QC Quality Control)	Operation Description QC5- Inspect part comple Memo	leteness to step on W/O	Set Up/ Run Hours 0.00 27 0.00 27	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 Large Fab Large Fab			5-3 by joining D3215-3A a AL ROD BATCH: M) h	0.00 0.00 nd D3215-3B as per Dw 32 334 Identify				<u> </u>) (3:	 -05-01	5 DA 09 89
180 *4.00*	10	-QC9_Inspect visual per	QSI004-Fusion-Welds	0.00	/ A ? \			who			

Quality Control

Qc O Memo

												DQA:	Date	≘: _	·
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	JANCE / UP	DATE		*			•
											(QA Closed:	Date	9:	
Work Ord	or:			·		DISPOSITION				AGAINST D	ΕP	ARTMENT/	PROCESS		
WOIK OIG	Ci.					Rework	ٔ ٦		Skid-tube	Crosstube	\neg		Water Jet		Engineering
Part	No.					Scrap	1		Machining	Small Fab	1	Prod	d. Eng. Coor.		Quality
						Use-as-is			noforming	Finishing	٦		e/Packaging	٦	Other
NCR	No.					Work Order Update			Large Fab	Composite			Supplier		
								<u> </u>			_	,		·· `,	
Root					•	ption of work order update	1	Initial		tion		Sign &			
Cause	_	Date	Step	Qty	(or Non-conformance	Cł	nief Eng	Desc	ription	4	Date	Verification	4	QC Inspector
Doc/Data	<u></u>		l						ĺ		ļ			l	
Equip/Tooling															
Operator	L_														
Material	L.										Ì				•
Setup	L														
Other	L														
Process	L	j													
Supplier											-				
Training														i	
Unapproved															
						F	AUI	LT CATE	GORY						
Landi	ing (Gear				General	_	7		_	_		-		
	<u></u>	Bending				Bend	\perp	Grain			-	Ovalized			Pressure/Forced
		Centre No	ot Conce	ntric to	o/s	BOM/Route		Hardwa	re		╝	Over/Under	tolerance		Temperature/Cure
		Cracks				Broken/Damaged		Inspecti	on Incomplete	L		Part Incorred	<u>}</u>	_	Weld
	L	Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/	'Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
		Cuffs				Contamination		Mainte	nance			Part Moved			
}	Heat Treat Countersink					Mislabeled Positioned Wrong									
		Inspection Strip in Tube Cut Too Short						Misread Power Los				Power Loss/	Surge		Other

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drill Holes

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

<u>*</u>				and and an arrange and a state of the state							
Work Ord January-18-13		703		*957				Page 4			
Item ID: Revision ID: Item Name:	D3215-3 Webbing Tidy	,		Accept	*N900	040	100)* s	etup Sta	I W	S1* S2*
Start Date: Required Date Reference:	1/16/13 : 2/08/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item I Customer:	D:					
Approvals:	Process Pla	in:	Date:	Tooling: _ SPC (Y/N):		nte:		F	tun Sta Sto	1/7	R1* R2*
Sequence ID/ Work Center I 190 *1 QC* Quality Control	D	Operation Description QC5- Inspect part comple Memo	teness to step on W/O	Set Up/ Run House 0.00 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 *200* HandFinish Hand Finishing		Chemical Conversion Co.	at per QS1005 4.1	0.00				30	Ale	3 (3.	5-8

210

210 Powdercoat

Powder Coating

0.00

20 & BV 13-5-9

										DQA:	Date:	•
NCR: Ye	s / No				WORK ORDER NON-	100	NFOR	MANCE / UP	DATE			
					<u> </u>					QA Closed:	Date:	
Work Order:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part No			-		Rework Scrap Use-as-is			Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR No	•				Work Order Update]		Large Fab	Composite		Supplier	
Root				Descri	ption of work order update		nitial	Ac	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling]											
Operator	_											
Material			1									
Setup												
Other												
Process	_											
Supplier				İ								
Training	4											
Unapproved		1	1			1				<u> </u>		
					····	AUL	T CATE	GORY		····		<u></u>
Landing	_			_	General	_	1		_	.	Γ	7
	Bending			<u></u>	Bend	\vdash	Grain		<u> </u>	Ovalized		Pressure/Forced
1	Centre N	ot Conce	ntric to	o/s	BOM/Route		Hardwa	are	<u> </u>	Over/Under		Temperature/Cure
1	Cracks			1	Broken/Damaged	1	Inspect	ion Incomplete	l	Part Incorre	ct l	Weld

Instructions Incomplete/Unclear

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Wrong Stock Pulled

Other

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Part Moved

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Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Crushed/Crimped.

Inspection Strip in Tube

Torque Waves in Extrusion

Cuffs

Heat Treat

Burrs

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Work Ord January-18-13		703		*9570		·	·	Page		
Item ID: Revision ID:	D3215-3			Accept	*N9000	0401	N 0*	Setup	Start Stop	147.21
Item Name: Start Date: Required Date Reference:	Webbing Tidy 1/16/13 2: 2/08/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item II Customer:) :				*NS2*
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):	Da	te:	-	Run	Start Stop	*NR1* *NR2*
Sequence ID/ Work Center 1 220 *20 * QC Quality Control	ID .	Operation Description QC3- Inspect Part Finish Memo		Set Up/ Run Hours 0.00 Show	Tool ID	Tool # Pla Co	an Acce ode Qty	pt Re Qt	-	Reject Insp. Number Stamp
230 *230* Packaging Packaging		Packaging Memo	J034	0.00		19] 3/0/1	/o -(20	

240

QC21- Final Inspection - Work Order Release

0.00

240

Memo

0.00

Quality Control

1305-10 NUE 13-5-10

										DQA:	Date	
NCR:	Yes	/ No				WORK ORDER NON-C	ONFOR	MANCE / UPI	DATE			•
										QA Closed:	Date	
Work Orde	or.					DISPOSITION			AGAINST DE	PARTMENT,	/PROCESS	
WOIK OIG	C1					Rework		Skid-tube	Crosstube]	Water Jet	Engineering
Part I	No.					Scrap		Machining	[,] Small Fab	Pro	d. Eng. Coor.	Quality
	_					Use-as-is	Therr	noforming	Finishing	Rec/Sto	re/Packaging	Other
NCR I	No					Work Order Update		Large Fab	Composite]	Supplier	
Root	-				Descri	ption of work order update	Initial	Act	tion	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Chief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data	Ш											
Equip/Tooling	Ш											
Operator	Ш											
Material	Ц										-	
Setup	Ш											
Other	Ш							:				
Process												İ
Supplier	Ш											
Training	Ш											
Unapproved			<u></u>							<u> </u>		
							AULT CATE	GORY				
Landi					_	General			_	7	_	-
	-	Bending				Bend	Grain		<u></u>	Ovalized	<u> </u>	Pressure/Forced
	Ш	Centre No	ot Conce	ntric to	o/s	BOM/Route	Hardwa		<u> </u>	Over/Under	<u></u>	Temperature/Cure
	Н	Cracks		•		Broken/Damaged	⊢	ion Incomplete	<u> </u>	Part Incorre	<u> </u>	Weld
	-	Crushed/	Crimped.			Burrs		tions Incomplete/l	Unclear	Part Lost/M	issing	Wrong Stock Pulled
		Cuffs			<u> </u>	Contamination	enance	<u> </u>	Part Moved		•	
		Heat Trea	it		_	Countersink	Mislabe	eled		Positioned V		
	Inspection Strip in Tube Cut Too Short Mi						Misread Power Loss/Surge Other					Other
		Ripples in	Bend			Drill Holes	Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

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Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

January-18-13 9:58:00 AM

Work Order ID:

95703

Parent Item:

D3215-3

Parent Item Name:

Webbing Tidy

Start Date: 1/16/13

Required Date: 2/08/13

Start Qty: 20.00

Required Qty: 20.00

Comments:

IPP A 04.01.06

New issue KJ/RF

IPP Rev:B Now on Waterjet 06-07-03

JLM

IPP rev C ecn 940

07.06.12 EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.040		Purchased	No			100	sf	101.7789	0.008	0.168422		7	
5052-H32 .040 Sheet									Δ		J)	13/	05/0
				Location .		Loc Qty	<u>Lo</u>	c Code				•	
				MAT022		101.778945					11		
				119	384	45.578945			<u> </u>	1684	XX		
				122	406	56.2							
M5052H32S.040		Purchased	No			130	sf	101.7789	0.0258	0.54 3 <u>T</u> 58			4
5052-H32 .040 Sheet									4	_0.6_		The state of the s	JMB.
				Location		Loc Qty	<u>Lo</u>	c Code					
				MAT022		101.778945							
				119	384	45.578945							•
				122	406	56.2			133	406			

NCR:	Yes /	No				WORK ORDER NON	-COI	NFOR	MANCE / UPI	DATE			•
											QA Closed:	Date	e:
Work Order:				DISPOSITION		AGAINST DEPARTMENT/PROCESS Skid-tube Crosstube Water Jet Engineering							
Part No						Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Large Fab Composite			Pro Rec/Sto	Engineering Quality Other	
Root					Descri	ption of work order update		nitial	Act	tion	Sign &	·	
Cause	D	ate	Step	Qty	. (or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling	Ш								}				
Operator	Ш												
Material													
Setup	Ш												
Other		,											
Process	Щ												
Supplier	Н						Ì						
Training							ŀ						
Unapproved					1		50111	T CATE	CORV		<u> </u>	<u> </u>	· .
l and:	ng Gear					General	FAUL	I CATE	GURT				
Landi		ding				Bend		Grain			Ovalized	. [Pressure/Forced
	lacksquare	_	t Concor	atric to		BOM/Route	\vdash	Hardwa	aro.	<u> </u>	-	tolerance	Temperature/Cure
	Centre Not Concentric to O/S Cracks				^{0/3} -	Broken/Damaged		Inspection Incomplete		Over/Under tolerance Part Incorrect		Weld	
	Crushed/Crimped.			Burrs		Instructions Incomplete/Unclear			Part Lost/M	<u>-</u>	Wrong Stock Pulled		
	Cuffs				Contamination		Maintenance			Part Moved			
	Heat Treat					Countersink		Mislabeled			Positioned \	N rong	
			· Strip in	Tube		Cut Too Short		Misread					Other
		oles in		. , -		Drill Holes		Offset		L	_	, L	\
			aves in E	xtrusio	n	Drawing		1	Calibration		•		
	_		equence			Finish		Out of 9	Sequence				

Outside Dimensions

DQA: Date:

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

DART AEROSPACE LTD	Work Order:	95703
Description: Webbing Tidy	Part Number:	D3215-3A
Inspection Dwg: D3215 Rev: D		Page 1 of 1

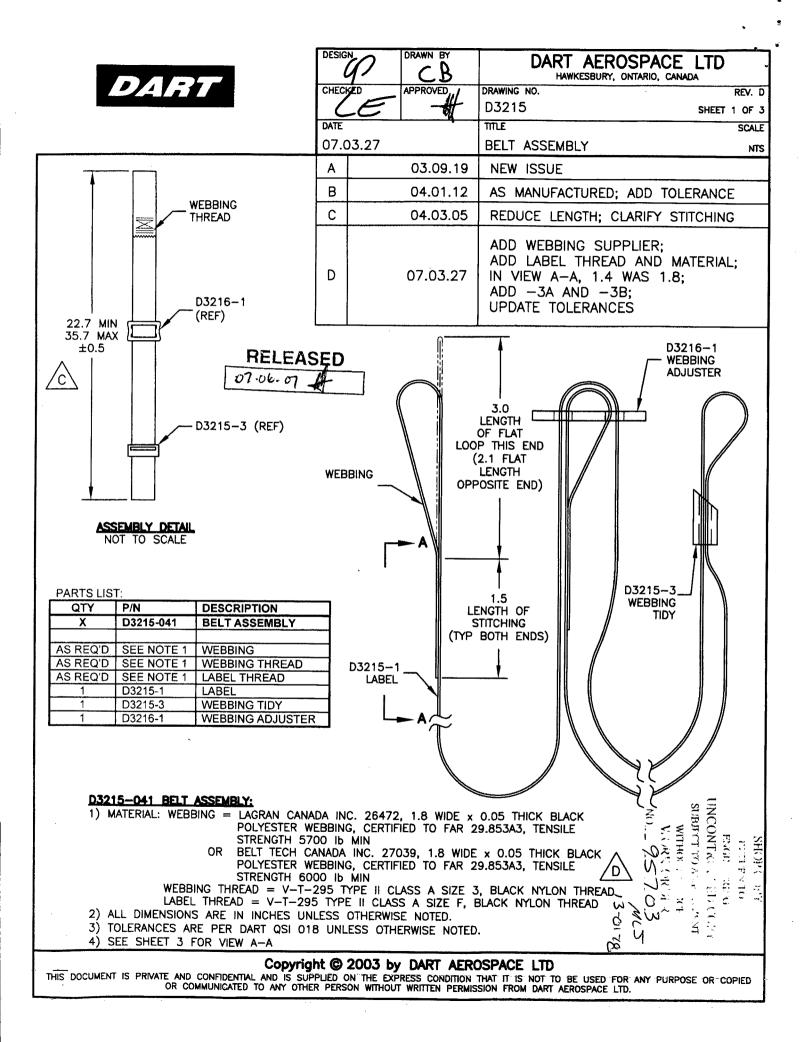
FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

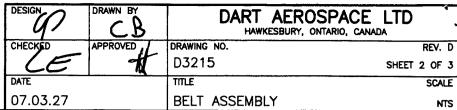
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments		
1.92	+/-0.030	1.919	_		V	Ilonoi		
0.20	+/-0.030	0.197"	_		V	JAI		
0.78	+/-0.030	0.777	~		V			
0.20	+/-0.030	0.201"	_		V			
2.46	+/-0.030	2.461"	_		٧			
0.57	+/-0.030	0.570"	_		V			
					,			
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						· · · · · · · · · · · · · · · · · · ·		

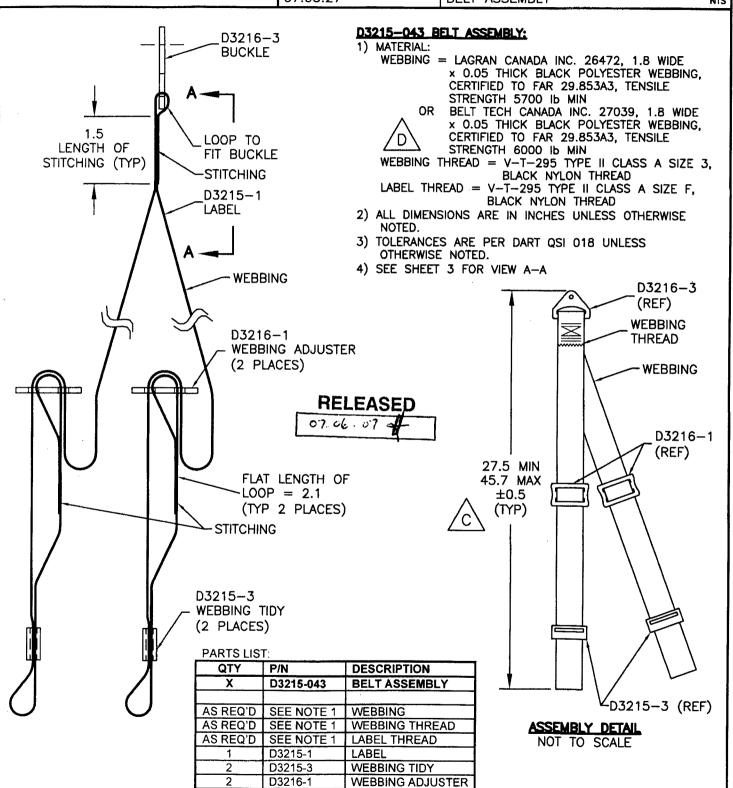
		A		
Measured by: Jp	Audited by:	27	Prototype Approval:	N/A
Date: 13-5-2	Date:	1355	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α_	04.02.10	New Issue	KJ/RF	7.45.000
В	06.03.15	Dwg Rev update	KJ/JLM	
С	07.10.24	Dimensions updated per Dwg Rev D	KJ/EC/DD	
D		0.53 dimension removed	KJ/DD	NX.





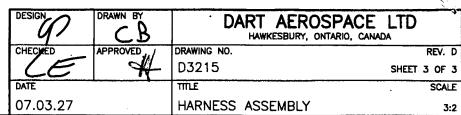


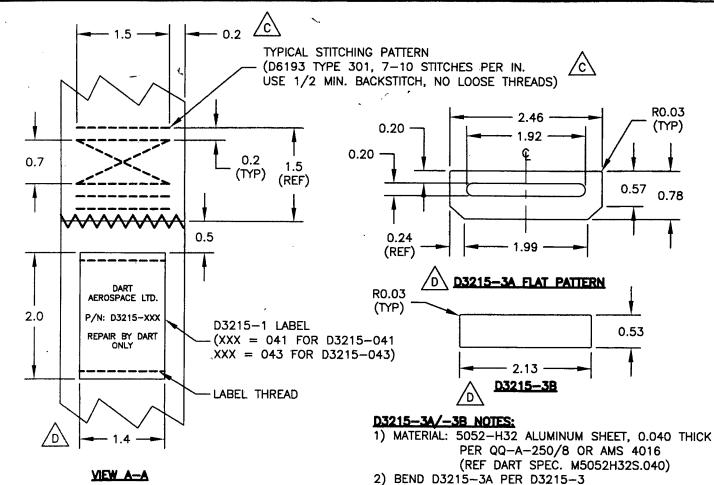


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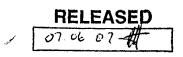




D3215-1 LABEL:

1) MATERIAL: WHITE TYVEK OR WHITE POLYESTER WHICH MEETS FMVSS 302

- 2) USE 1/8 BLACK LETTERING
- 3) CENTER ON BELT WIDTH



0.19 D3215-3A BEND R0.03 x 90° (2 PLACES) D3215-3B 2X

GENERAL NOTES: 1) BREAK ALL SHARP EDGES 0.005 TO 0.010

- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

D3215-3 NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3

D3215-3 WEBBING TIDY

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